OF MEMORY IN INFORMATION DELIVERY ENVIRONMENTS," and also claims priority from co-pending Provisional Application Serial No. 60/246,445 filed on November 7, 2000 which is entitled "SYSTEMS AND METHODS FOR PROVIDING EFFICIENT USE OF MEMORY FOR NETWORK SYSTEMS," and also claims priority from co-pending Provisional Application Serial No. 60/246,359 filed on November 7, 2000 which is entitled "CACHING ALGORITHM FOR MULTIMEDIA SERVERS," the disclosures of each of the forgoing applications being incorporated herein by reference. This application also claims priority from co-pending United States Patent Application Serial Number 09/797,200 filed on March 1, 2001 FOR THE DETERMINISTIC "SYSTEMS AND **METHODS** which is entitled MANAGEMENT OF INFORMATION" which itself claims priority from Provisional Application Serial No. 60/187,211 filed on March 3, 2000 which is entitled "SYSTEM AND APPARATUS FOR INCREASING FILE SERVER BANDWIDTH," the disclosures of each of the forgoing applications being incorporated herein by reference. This application also claims priority from co-pending Provisional Application Serial No. 60/246,401 filed on November 7, 2000 which is entitled "SYSTEM AND METHOD FOR THE DETERMINISTIC DELIVERY OF DATA AND SERVICES," the disclosure of which is incorporated herein by reference.

Replacement paragraph for page 49, lines 16-21:

In yet other embodiments, cycle time may <u>be</u> modified or limited based on a number of factors. For example cycle time may be limited or capped by limiting read-ahead buffer size, for example, using Resource Model Equations (17B), (18B) or (19B). Cycle time may also be limited or capped by placing a set limit on the maximal buffer size (*e.g.*, by placing a 2MB limit on the maximal buffer size in a case where system throughput does not increase, or does not increase significantly, with any increase in the buffer size beyond 2MB).